

A Plant by Any Other Name

GRIN Web Site Updated and Enhanced

Need to find up-to-date scientific names for economically important vascular plants—without spending a small fortune for a current reference book?

Agricultural Research Service experts in taxonomy, or the official naming of living things, have the solution: a newly improved, user-friendly, multilingual web site.

“At the site, interested people can find the correct common and scientific names of plants as well as information about their uses. The information was garnered during more than 2 decades of nomenclatural research on economic plants by ARS taxonomists,” says ARS botanist John H. Wiersema. He worked with former ARS taxonomist Blanca León at the Systematic Botany and Mycology Laboratory in Beltsville, Maryland, on developing and upgrading the site. The web address is <http://www.ars-grin.gov/npgs/tax>.

“The web site adds some important improvements to the Germplasm Resources Information Network (GRIN) taxonomy area, including a new web page devoted to enhancing and expanding the *World Economic Plants: A Standard Reference*. The 749-page reference was published in 1999,” says Wiersema.

“So far, the web pages devoted to economic plants and their uses—a subset of GRIN taxonomy—comprise scientific information on 9,356 of the most important plant species from 2,616 genera and 290 families,” he says. The economic coverage includes plants or plant products that are traded, regulated, or otherwise used in international commerce. Many plants important to regional commerce of larger countries are also included as well as plants with recognized potential for widespread economic use or for negative economic impact, like weeds and poisonous plants.

Several search engines allow users to key in criteria like genus, common name, or economic use—such as food, fiber, forage, timber, fuel, spice, or genetic,

(K9319-1)



(K2601-2)



KEITH WELLER (K8881-8)



The revised web site for the Germplasm Resources Information Network (GRIN) now includes a new segment on noxious weeds, such as (top to bottom) dyer's woad, leafy spurge, and yellow starthistle.

medicinal, ornamental, and social uses.

Another advantage of the web site over the book is the user's ability to search for a plant by country, state, or geographical distribution. Users can produce a condensed report that's similar to the book's format. Or they can click on links to more detailed information on each species, such as scientific and common names, synonyms, native distribution, and botanical uses. Each name has a unique identifying code number, a reference to the original description, and other pertinent taxonomic literature.

“Over 75,000 literature citations are cross-referenced to our economic-plants names alone and over 175,000 to all our names,” Wiersema says. “And we have developed Spanish and Portuguese versions of many of our web pages, with French and German ones on the way.”

Another new web page provides access to a specialized segment of the GRIN database: The noxious-weed site lists the names of thousands of weeds and has links to the USDA-ARS “Invaders” database and other federal weed documents.

“Links connect users to other available on-line state noxious-weed documents or regulatory agencies,” says Wiersema. “Several state sites have drawings or pictures of the weeds and other information of interest to scientists, gardeners, and farmers.” The new web pages are part of the GRIN database, which includes over 62,000 botanical names of mainly economic plants.

Other linked taxonomy pages access GRIN data on federally and internationally regulated, threatened, and endangered plants and on vascular plant family and generic names from throughout the world.

The site is well used. “In October 2000, over 70,000 reports were provided to users of GRIN taxonomy, so it is obviously of great use to workers in agriculture, commerce, regulation, and other fields,” Wiersema says. “By tapping into our web site, they can all be assured they are talking about the same plant.”—By **Hank Becker**, ARS.

This research is part of Plant, Microbial, and Insect Genetic Resources, Genomics, and Genetic Improvement, an ARS National Program (#301) described on the World Wide Web at <http://www.nps.ars.usda.gov>.

John H. Wiersema is with the USDA-ARS Systematic Botany and Mycology Laboratory, Bldg. 011A, BARC-West, Beltsville, MD 20705-2350; phone (301) 504-9181, fax (301) 504-5810, e-mail jwiersema@ars-grin.gov. u